



Systems Compatibility Guide

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Introduction

VMware ESX is tested for compatibility with a variety of major guest operating systems running in virtual machines. Additionally, VMware ESX is tested for compatibility with currently shipping platforms from the major server manufacturers in pre-release testing. Our goal is to support a variety of storage and network adapters used as standard options for these platforms as they come to market.

vSphere 4.0 requires 64bit hardware . For proper support of the 64bit Guest Operating Systems, necessary virtualization BIOS settings need to be enabled. Please see KB article 1003944 (<http://kb.vmware.com/kb/1003944>)for more information.

In addition, many server vendors started implementing some or all VMware specified CIM providers for server manageability. Therefore, health and monitoring information may be incomplete or inaccurate. Please read KB article 1010716 (<http://kb.vmware.com/kb/1010716>) for more information.

If you are having a technical issue with 3rd party HW/SW and it is not found on this list, please refer to our 3rd Party HW/SW support policy at <http://www.vmware.com/support/policies/ThirdParty.html>.

Depopulated Sockets - VMware supports all configurations from 1 socket to N sockets being populated on an N-socket server that is in this Systems Compatibility Guide. The depopulated Server Configuration must have at least 2 physical cores. In addition, the OEM must support the depopulated Server Configuration. All servers are supported in depopulated configuration mode unless noted otherwise via a footnote.

VMware works closely with each of its OEMs to drive towards mutual support of ESX at the time of announcement. Due to different product release cycles, levels of testing, and OEM agreements, not all OEM devices will be supported at the general availability date of a new version of ESX.

For Intel and AMD processors, VMware supports the processor series and the processor model that are listed with each server. Please check with the server vendor for specific CPU support.

RECOMMENDED CPU CLOCK SPEED

ESX 3.0:

- * Minimum CPU clock speed - 1500 MHz
- * Minimum CPU clock speed, Virtual SMP - 1500 MHz

ESX 3.0.1:

- * Minimum CPU clock speed - 1500 MHz
- * Minimum CPU clock speed, Virtual SMP - 1500 MHz

ESX 3.0.2:

* Minimum CPU clock speed - 1500 MHz

* Minimum CPU clock speed, Virtual SMP - 1500 MHz

ESX 3.0.3:

* Minimum CPU clock speed - 1500 MHz

* Minimum CPU clock speed, Virtual SMP - 1500 MHz

ESX 3.5:

* Minimum CPU clock speed - 1500 MHz

* Minimum CPU clock speed, Virtual SMP - 1500 MHz

ESX 3i Embedded:

* Minimum CPU clock speed - 1500 MHz

* Minimum CPU clock speed, Virtual SMP - 1500 MHz

ESX 3i Installable:

* Minimum CPU clock speed - 1500 MHz

* Minimum CPU clock speed, Virtual SMP - 1500 MHz

VMware Fault Tolerance (FT) is a component of VMware vSphereT that ensures continuous availability for virtual machines against hardware failures. VMware FT creates virtual machine "pairs" that run in lock step - mirroring the execution state of a VM. Support of VMware FT varies by system. Please review the system details to determine its specific support for VMware FT.

Server Device and Model Information

The detailed lists show actual vendor devices that are either physically tested or are similar to the devices tested by VMware or VMware partners. VMware provides support only for the devices that are listed in this document

Manufacturer	Model	CPU Model	CPU Series	Supported Releases
Argus Computersysteme GmbH	ARGUS Business Server 2932-1U	Quad-core AMD Opteron 2384	Quad-core AMD Opteron 238x series	ESXi 3.5 Installable U4, ESXi 3.5 Installable U3
Argus Computersysteme GmbH	ARGUS Business Server 2932-2U	Quad-core AMD Opteron 2384	Quad-core AMD Opteron 238x series	ESXi 3.5 Installable U4, ESXi 3.5 Installable U3
Argus Computersysteme GmbH	ARGUS Business Server 4985-2U	Quad-core AMD Opteron 8384	AMD Opteron 838x series	ESXi 3.5 Installable U4, ESXi 3.5 Installable U3
Argus Computersysteme GmbH	ARGUS Business Server 4985-4U	Quad-core AMD Opteron 8384	AMD Opteron 838x series	ESXi 3.5 Installable U4, ESXi 3.5 Installable U3
Argus Computersysteme GmbH	ARGUS Business Server 4985-5U	Quad-core AMD Opteron 8384	AMD Opteron 838x series	ESXi 3.5 Installable U4, ESXi 3.5 Installable U3

Manufacturer	Model	CPU Model	CPU Series	Supported Releases
DELL	PowerEdge 2970	Quad Core AMD Opteron 23xx	Quad-core AMD Opteron 2300 series	ESXi 3.5 Installable U4, ESXi 3.5 Installable U3, ESXi 3.5 Installable U2, ESXi 3.5 Installable U1
DELL	PowerEdge 2970	Quad-core AMD Opteron 2384	Quad-core AMD Opteron 238x series	ESXi 3.5 Installable U4 ¹ , ESXi 3.5 Installable U3 ¹ , ESXi 3.5 Installable U2 ¹
DELL	PowerEdge 6950	Quad Core AMD Opteron 8356	Quad-core AMD Opteron 835x series	ESXi 3.5 Installable U4
DELL	PowerEdge M605	Quad Core AMD Opteron 23xx	Quad-core AMD Opteron 2300 series	ESXi 3.5 Embedded U4, ESXi 3.5 Embedded U3, ESXi 3.5 Embedded U2, ESXi 3.5 Embedded U1, ESXi 3.5 Installable U4, ESXi 3.5 Installable U3, ESXi 3.5 Installable U2, ESXi 3.5 Installable U1 ²
DELL	PowerEdge M805	Quad-core AMD Opteron 2384	Quad-core AMD Opteron 238x series	ESXi 3.5 Embedded U4 ² , ESXi 3.5 Embedded U3 ² , ESXi 3.5 Embedded U2 ² , ESXi 3.5 Installable U4 ² , ESXi 3.5 Installable U3 ² , ESXi 3.5 Installable U2 ²
DELL	PowerEdge M805	Quad Core AMD Opteron 23xx	Quad-core AMD Opteron 2300 series	ESXi 3.5 Embedded U4, ESXi 3.5 Embedded U3, ESXi 3.5 Embedded U2, ESXi 3.5 Installable U4, ESXi 3.5 Installable U3, ESXi 3.5 Installable U2
DELL	PowerEdge M905	Quad-core AMD Opteron 8384	AMD Opteron 838x series	ESXi 3.5 Embedded U4 ² , ESXi 3.5 Embedded U3 ² , ESXi 3.5 Embedded U2 ² , ESXi 3.5 Installable U4, ESXi 3.5 Installable U3, ESXi 3.5 Installable U2
DELL	PowerEdge M905	Quad Core AMD Opteron 83xx	Quad-core AMD Opteron 8300 series	ESXi 3.5 Embedded U4, ESXi 3.5 Embedded U3, ESXi 3.5 Embedded U2, ESXi 3.5 Installable U4, ESXi 3.5 Installable U3, ESXi 3.5 Installable U2
DELL	PowerEdge R805	Quad-core AMD Opteron 2384	Quad-core AMD Opteron 238x series	ESXi 3.5 Embedded U4 ² , ESXi 3.5 Embedded U3 ² , ESXi 3.5 Embedded U2 ² , ESXi 3.5 Installable U4 ² , ESXi 3.5 Installable U3 ² , ESXi 3.5 Installable U2 ²
DELL	PowerEdge R805	Quad Core AMD Opteron 23xx	Quad-core AMD Opteron 2300 series	ESXi 3.5 Embedded U4, ESXi 3.5 Embedded U3, ESXi 3.5 Embedded U2, ESXi 3.5 Embedded U1, ESXi 3.5 Installable U4, ESXi 3.5 Installable U3, ESXi 3.5 Installable U2, ESXi 3.5 Installable U1 ²
DELL	PowerEdge R905	Quad Core AMD Opteron 83xx	Quad-core AMD Opteron 8300 series	ESXi 3.5 Embedded U4, ESXi 3.5 Embedded U3, ESXi 3.5 Embedded U2, ESXi 3.5 Embedded U1, ESXi 3.5 Installable U4, ESXi 3.5 Installable U3, ESXi 3.5 Installable U2, ESXi 3.5 Installable U1 ³
DELL	PowerEdge R905	Quad-core AMD Opteron 8384	AMD Opteron 838x series	ESXi 3.5 Embedded U4 ⁴ , ESXi 3.5 Embedded U3 ⁴ , ESXi 3.5 Embedded U2 ⁴ , ESXi 3.5 Installable U4 ⁴ , ESXi 3.5 Installable U3 ⁴ , ESXi 3.5 Installable U2 ⁴

Manufacturer	Model	CPU Model	CPU Series	Supported Releases
DELL	PowerEdge T605	Quad-core AMD Opteron 2384	Quad-core AMD Opteron 238x series	ESXi 3.5 Embedded U4, ESXi 3.5 Embedded U3, ESXi 3.5 Installable U4, ESXi 3.5 Installable U3
DELL	PowerEdge T605	Quad Core AMD Opteron 23xx	Quad-core AMD Opteron 2300 series	ESXi 3.5 Embedded U4, ESXi 3.5 Embedded U3, ESXi 3.5 Installable U4, ESXi 3.5 Installable U3
Fujitsu Siemens Computers	Primergy RX330 S1	Quad Core AMD Opteron 23xx	Quad-core AMD Opteron 2300 series	ESXi 3.5 Embedded U4, ESXi 3.5 Embedded U3, ESXi 3.5 Embedded U2, ESXi 3.5 Embedded U1
HP	ProLiant BL465C	Quad Core AMD Opteron 2356	Quad-core AMD Opteron 235x series	ESXi 3.5 Installable U1
HP	ProLiant BL465c G5	Quad Core AMD Opteron 2356	Quad-core AMD Opteron 235x series	ESXi 3.5 Embedded, ESXi 3.5 Installable U1, ESXi 3.5 Installable
HP	ProLiant BL465c G5	Quad-core AMD Opteron 2384	Quad-core AMD Opteron 238x series	ESXi 3.5 Embedded U4, ESXi 3.5 Installable U4
HP	ProLiant BL495c G5	Quad Core AMD Opteron 2356	Quad-core AMD Opteron 235x series	ESXi 3.5 Embedded U4 ^{5 kb: 1} , ESXi 3.5 Embedded U3 ^{5 kb: 1} , ESXi 3.5 Installable U4 ^{5 kb: 1} , ESXi 3.5 Installable U3 ^{5 kb: 1}
HP	ProLiant BL495c G5	Quad-core AMD Opteron 2384	Quad-core AMD Opteron 238x series	ESXi 3.5 Embedded U4, ESXi 3.5 Embedded U3, ESXi 3.5 Installable U4, ESXi 3.5 Installable U3
HP	ProLiant BL685C	Quad Core AMD Opteron 8356	Quad-core AMD Opteron 835x series	ESXi 3.5 Installable U1
HP	ProLiant BL685c G5	Quad Core AMD Opteron 8356	Quad-core AMD Opteron 835x series	ESXi 3.5 Embedded U4, ESXi 3.5 Embedded U3, ESXi 3.5 Embedded U2, ESXi 3.5 Embedded U1, ESXi 3.5 Installable U4, ESXi 3.5 Installable U3, ESXi 3.5 Installable U2, ESXi 3.5 Installable U1
HP	ProLiant BL685C G6	Quad Core AMD Opteron 83xx	Quad-core AMD Opteron 8300 series	ESXi 3.5 Embedded U4 ^{kb: 1} , ESXi 3.5 Installable U4 ^{kb: 1}
HP	ProLiant DL365	Quad Core AMD Opteron 2356	Quad-core AMD Opteron 235x series	ESXi 3.5 Installable U1
HP	ProLiant DL365 G5	Quad Core AMD Opteron 2356	Quad-core AMD Opteron 235x series	ESXi 3.5 Embedded, ESXi 3.5 Installable U1, ESXi 3.5 Installable
HP	ProLiant DL385 G2	Quad Core AMD Opteron 2356	Quad-core AMD Opteron 235x series	ESXi 3.5 Installable U1
HP	ProLiant DL385 G5	Quad Core AMD Opteron 2356	Quad-core AMD Opteron 235x series	ESXi 3.5 Embedded U4, ESXi 3.5 Embedded U3, ESXi 3.5 Embedded U2, ESXi 3.5 Embedded U1, ESXi 3.5 Embedded, ESXi 3.5 Installable U4, ESXi 3.5 Installable U3, ESXi 3.5 Installable U2, ESXi 3.5 Installable U1
HP	ProLiant DL385 G5p	Quad-core AMD Opteron 2384	Quad-core AMD Opteron 238x series	ESXi 3.5 Embedded U4, ESXi 3.5 Embedded U3, ESXi 3.5 Installable U4, ESXi 3.5 Installable U3

Manufacturer	Model	CPU Model	CPU Series	Supported Releases
HP	ProLiant DL585 G2	Quad Core AMD Opteron 8356	Quad-core AMD Opteron 835x series	ESXi 3.5 Installable U1
HP	ProLiant DL585 G5	Quad Core AMD Opteron 8356	Quad-core AMD Opteron 835x series	ESXi 3.5 Embedded U4, ESXi 3.5 Embedded U3, ESXi 3.5 Embedded U2, ESXi 3.5 Embedded U1, ESXi 3.5 Installable U4, ESXi 3.5 Installable U3, ESXi 3.5 Installable U2, ESXi 3.5 Installable U1
HP	ProLiant DL785 G5	Quad Core AMD Opteron 8356	Quad-core AMD Opteron 835x series	ESXi 3.5 Embedded U4, ESXi 3.5 Embedded U3, ESXi 3.5 Embedded U2 ^{kb: 2} , ESXi 3.5 Installable U4, ESXi 3.5 Installable U3, ESXi 3.5 Installable U2 ^{kb: 2} , ESXi 3.5 Installable U1
IBM	IBM BladeCenter LS22	Quad-core AMD Opteron 2376	Quad-core AMD Opteron 237x series	ESXi 3.5 Embedded U4, ESXi 3.5 Embedded U3 ⁶ , ESXi 3.5 Installable U4, ESXi 3.5 Installable U3
IBM	IBM BladeCenter LS22	Quad Core AMD Opteron 83xx	Quad-core AMD Opteron 8300 series	ESXi 3.5 Installable U4, ESXi 3.5 Installable U3, ESXi 3.5 Installable U2
IBM	IBM BladeCenter LS22	Quad Core AMD Opteron 83xx	Quad-core AMD Opteron 8300 series	ESXi 3.5 Installable U4, ESXi 3.5 Installable U3, ESXi 3.5 Installable U2
IBM	IBM BladeCenter LS22	Quad-core AMD Opteron 2376	Quad-core AMD Opteron 237x series	ESXi 3.5 Embedded U3 ⁶ , ESXi 3.5 Installable U3
IBM	IBM BladeCenter LS42	Quad Core AMD Opteron 83xx	Quad-core AMD Opteron 8300 series	ESXi 3.5 Installable U4, ESXi 3.5 Installable U3, ESXi 3.5 Installable U2
IBM	IBM BladeCenter LS42	Quad-core AMD Opteron 8384	AMD Opteron 838x series	ESXi 3.5 Embedded U4 ⁶ , ESXi 3.5 Embedded U3 ⁶ , ESXi 3.5 Installable U4, ESXi 3.5 Installable U3
IBM	IBM BladeCenter LS42	Quad-core AMD Opteron 8376	Quad-core AMD Opteron 837x series	ESXi 3.5 Embedded U3 ⁶ , ESXi 3.5 Installable U3
IBM	IBM System x3455	Quad Core AMD Opteron 23xx	Quad-core AMD Opteron 2300 series	ESXi 3.5 Installable U4, ESXi 3.5 Installable U1
Sun Microsystems Inc	Sun Blade 8000 Modular System X8440 Server Module	Quad Core AMD Opteron 83xx	Quad-core AMD Opteron 8300 series	ESXi 3.5 Installable U4, ESXi 3.5 Installable U3, ESXi 3.5 Installable U2, ESXi 3.5 Installable U1
Sun Microsystems Inc	Sun Blade X6240	Quad Core AMD Opteron 23xx	Quad-core AMD Opteron 2300 series	ESXi 3.5 Installable U4, ESXi 3.5 Installable U3, ESXi 3.5 Installable U2
Sun Microsystems Inc	Sun Blade X6240	Quad-core AMD Opteron 2384	Quad-core AMD Opteron 238x series	ESXi 3.5 Installable U4, ESXi 3.5 Installable U3, ESXi 3.5 Installable U2
Sun Microsystems Inc	Sun Blade X6440	Quad Core AMD Opteron 83xx	Quad-core AMD Opteron 8300 series	ESXi 3.5 Installable U4 ⁷ , ESXi 3.5 Installable U3 ⁷ , ESXi 3.5 Installable U2 ^{8, 7}
Sun Microsystems Inc	Sun Blade X6440	Quad-core AMD Opteron 8384	AMD Opteron 838x series	ESXi 3.5 Installable U4, ESXi 3.5 Installable U3, ESXi 3.5 Installable U2
Sun Microsystems Inc	Sun Blade X8440	Quad Core AMD Opteron 83xx	Quad-core AMD Opteron 8300 series	ESXi 3.5 Installable U1

Manufacturer	Model	CPU Model	CPU Series	Supported Releases
Sun Microsystems Inc	Sun Blade X8440	Quad Core AMD Opteron 83xx	Quad-core AMD Opteron 8300 series	ESXi 3.5 Installable U4, ESXi 3.5 Installable U3, ESXi 3.5 Installable U2
Sun Microsystems Inc	Sun Fire X2200 M2	Quad Core AMD Opteron 23xx	Quad-core AMD Opteron 2300 series	ESXi 3.5 Installable U3 ⁹ , ESXi 3.5 Installable U2 ¹⁰
Sun Microsystems Inc	Sun Fire X2200 M2	Quad-core AMD Opteron 2384	Quad-core AMD Opteron 238x series	ESXi 3.5 Installable U4 ^{11, 12} , ESXi 3.5 Installable U3 ^{11, 12} , ESXi 3.5 Installable U2 ^{11, 12}
Sun Microsystems Inc	Sun Fire X4100 M2	Quad Core AMD Opteron 23xx	Quad-core AMD Opteron 2300 series	ESXi 3.5 Installable U4, ESXi 3.5 Installable U3, ESXi 3.5 Installable U2
Sun Microsystems Inc	Sun Fire X4140	Quad-core AMD Opteron 2380	Quad-core AMD Opteron 238x series	ESXi 3.5 Installable U4
Sun Microsystems Inc	Sun Fire X4140	Quad Core AMD Opteron 2356	Quad-core AMD Opteron 235x series	ESXi 3.5 Installable U4
Sun Microsystems Inc	Sun Fire X4140	Quad Core AMD Opteron 23xx	Quad-core AMD Opteron 2300 series	ESXi 3.5 Installable U4
Sun Microsystems Inc	Sun Fire X4200 M2	Quad Core AMD Opteron 23xx	Quad-core AMD Opteron 2300 series	ESXi 3.5 Installable U4, ESXi 3.5 Installable U3, ESXi 3.5 Installable U2
Sun Microsystems Inc	Sun Fire X4240	Quad Core AMD Opteron 23xx	Quad-core AMD Opteron 2300 series	ESXi 3.5 Installable U4
Sun Microsystems Inc	Sun Fire X4240	Quad-core AMD Opteron 2380	Quad-core AMD Opteron 238x series	ESXi 3.5 Installable U4
Sun Microsystems Inc	Sun Fire X4440	Quad-core AMD Opteron 8380	AMD Opteron 838x series	ESXi 3.5 Installable U4
Sun Microsystems Inc	Sun Fire X4440	Quad Core AMD Opteron 83xx	Quad-core AMD Opteron 8300 series	ESXi 3.5 Installable U4
Sun Microsystems Inc	Sun Fire X4600 M2	Quad Core AMD Opteron 83xx	Quad-core AMD Opteron 8300 series	ESXi 3.5 Installable U4 ¹³ , ESXi 3.5 Installable U3 ^{8, 13} , ESXi 3.5 Installable U2 ^{8, 13}
Sun Microsystems Inc	Sun Fire X4600 M2	Quad-core AMD Opteron 8384	AMD Opteron 838x series	ESXi 3.5 Installable U4 ^{8, 13} , ESXi 3.5 Installable U3 ^{8, 13} , ESXi 3.5 Installable U2 ^{8, 13}
Tyan Computer	B4985V50V8H-8P-E	Quad-core AMD Opteron 8384	AMD Opteron 838x series	ESXi 3.5 Installable U4, ESXi 3.5 Installable U3
Tyan Computer	Thunder n4250QE (S4985-E)	Quad-core AMD Opteron 8384	AMD Opteron 838x series	ESXi 3.5 Installable U4, ESXi 3.5 Installable U3
Tyan Computer	Transport TA26 (B2932-E)	Quad-core AMD Opteron 2384	Quad-core AMD Opteron 238x series	ESXi 3.5 Installable U4, ESXi 3.5 Installable U3
Tyan Computer	Transport TX46 (B4985-E)	Quad-core AMD Opteron 8384	AMD Opteron 838x series	ESXi 3.5 Installable U4, ESXi 3.5 Installable U3
Unisys	ES7000/7405R G1	Quad Core AMD Opteron 8356	Quad-core AMD Opteron 835x series	ESXi 3.5 Installable U4, ESXi 3.5 Installable U3, ESXi 3.5 Installable U2
Unisys	ES7000/7450R G1	Quad Core AMD Opteron 83xx	Quad-core AMD Opteron 8300 series	ESXi 3.5 Installable U4 ^{8, 7} , ESXi 3.5 Installable U3 ^{8, 7} , ESXi 3.5 Installable U2 ^{8, 7} , ESXi 3.5 Installable U1 ^{8, 7}

Footnotes:

1. Requires patch ESX350-200809404-SG
2. Supported with one or two sockets populated.
3. Supports NetQueue-enabled.
4. Requires ESX/ESXi 3.5 Update 2 with patch ESX350-200809404-SG or ESX/ESXi 3.5 Update 3 to support AMD Shanghai CPUs
5. Supports HP's new Virtual Connect Flex-10 Technology
6. Requires ESXi Patch ESXe350-200901401-O-SG
7. AMD Opteron 8300 series. Requires Update 1 or higher
8. AMD Opteron 2300 series, Shanghai, Quad-core processors. Requires Update 2 or higher.
9. AMD Opteron 2300 series quad-core processors
10. AMD Opteron 2300 series quad-core processors.
11. SATA configuration is not tested.
12. iSCSI hardware initiator Base Connectivity supported only.
13. AMD Opteron 8300 series, Shanghai, Quad-Core processors. Requires Update 2 or higher

* Device Driver Notes

None

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